

wherein, when making a payment from the second purse, information is transferred between the second purse and a second terminal without ciphering of the information.

#### REMARKS

Claims 13-19 are pending in the Application.

By this response and amendment claims 13 and 14 have been amended to clearly define the invention of the present application. Namely, the claims have been amended to include the feature of an access control mechanism which control access to the purses within the IC card. None of the aforementioned amendments introduces any new matter within the meaning of 35 U.S.C. §132.

In the outstanding Office Action there was an objection to the Specification for minor informalities. The specification has been amended solely to correct these minor informalities. Therefore, reconsideration and withdrawal of the objection are respectfully requested.

The drawings were objected to for minor informalities. The drawings have been amended solely to correct these minor informalities. Therefore, reconsideration and withdrawal of the objection are respectfully requested.

Claim 13 was rejected under 35 U.S.C. §112, first paragraph as not being enabled by the specification.

It is stated in the Office Action that the specification does not support the limitation of an IC card, a first terminal group *and* a second terminal group.

Reconsideration and withdrawal of the rejection is respectfully requested.

The term "terminal" as recited in the claims of the present application does not refer to electrodes or pins of an IC card. The term "terminal" as recited in the claims of the present application does refer to any type of machine in which the IC card may be used. In some cases the IC card may not function and in other cases the IC card will be able to complete transactions. In one sense for example, the term "terminal" could be a cash withdrawal machine or point of sale cash register. Thus referring to FIG. 1 of the present application a "terminal" is the Withdrawing Machine 2.

The term "terminal group" as recited in the claims refers to the group of machines associated with each of the purses in an IC card. For instance as depicted in FIG. 4A of the present application, there are two machine ID's associated with the first purse. The two machine ID's in this figure represent a "**first terminal group**".

Likewise, there is one machine ID associated with the second purse. Thus, the machine ID's associated with the second purse represent a "**second terminal group**".

Finally, there are two machine ID's associated with the third purse. Thus the machine ID's associated with the third purse represent a "**third terminal group**".

In light of the foregoing, it is respectfully submitted that the application does support the limitation of an IC card, a first terminal group and a second terminal group as recited in the claims of the present application. Therefore, withdrawal of the rejection is respectfully requested.

In the outstanding Office Action, claims 13-19 were rejected under 35 U.S.C. §103 as being unpatentable over Read (EFTPOS: Electronic funds transfer at point of sale, and Howlectrics Electronics and Communications Engineering Journal, November/December

1989) in view of Harrop (New electronics for payment: IEE REVIEW OCTOBER 1989, pp 339-342).

Reconsideration and withdrawal of the rejection are respectfully requested.

The invention of the present Application as recited in claim 13 is an electronic purse system having a double-structured purse. The system has an IC card and a first terminal group which can transfer money to the IC card. Each terminal in the first group includes a first ciphering/deciphering unit which performs ciphering/deciphering of information relating to money utilizing a code number. A second terminal group can transfer money to the IC card. Each terminal in the second group does not perform ciphering/deciphering of the information related to money. The IC card has a) a first purse, b) a second purse, c) a second ciphering/deciphering unit for ciphering/deciphering of the information related to money obtained from one of the terminals in the first terminal group utilizing the code number, and d) an access control program including: a first purse access program to access the first purse using a second ciphering unit during the communication during a transaction with the terminal, a second purse access program to access the second purse without the ciphering and/or deciphering, and selecting steps program which selects one of the purse access programs according to a received information at the time said IC card is coupled to said one of the terminals, so that the terminal of said second terminal cannot access the first access program and the terminal of the first group can access both the first and second purse. When making a payment from the first purse, information relating to the money is transferred between the first purse and the one terminal of the first terminal group after ciphering of the information in the first and second ciphering/deciphering units in the IC card and in the terminal of the first terminal group. When making a payment from

the second purse, the information related to the money is transferred between the second purse and one of the terminals of the second terminal group without ciphering of the information.

The invention of the present Application as recited in claim 14 is an IC card applicable to an electronic purse system having a double-structured purse. The IC card has a first purse for storing a first amount of money therein; a second purse for storing a second amount of money therein; a first ciphering/deciphering means for ciphering/deciphering of information relating to money obtained from a first terminal having a second ciphering/deciphering unit and utilizing a code number, and an access control program including: a first purse access program to access the first purse using a second ciphering unit during the communication during a transaction with the terminal, a second purse access program to access the second purse without the ciphering and/or deciphering, and a selecting steps program which selects one of the purse access programs according to a received information at the time said IC card is coupled to said one of the terminals, so that the terminal of the second terminal cannot access the first access program and the terminal of the first group can access both the first and second purse. When making a payment from the first purse, information is transferred between the first purse and the first terminal after ciphering of the information in the first and second ciphering/deciphering units in the IC card and in the first terminal. When making a payment from the second purse, information is transferred between the second purse and a second terminal without ciphering of the information.

An advantage of the invention of the present Application is that the IC card contains two purses. One purse performs ciphering/deciphering before permitting a transaction, and

the other purse does not perform any ciphering/deciphering. Therefore, the security levels for each of the purses are different. The first purse is secure and the second purse is not secure for easier accessed.

Read discloses an electronic funds transfer at point of sale card having three levels of memory, a first secret memory, a second confidential memory and a third free memory (see page 267, left column of Read).

The first secret memory is within the card and unalterable. The first secret memory is used to store the operating system, application program and other programs that are necessary to perform a transaction.

The second confidential memory is unalterable and can be authorized to be read externally. The second confidential memory is used to store information such as manufacturing number, name of manufacturer, identification number, PIN number which can be read (by certain people such as the management or maintenance engineers) but can not be updated.

The third free memory may be read from and written into under control of an application program.

Harrop discloses a telephone that uses chip memory cards.

Neither Read nor Harrop either alone or in combination disclose, teach or suggest the limitation of "**a selecting steps program which selects one of said purse access programs according to a received information** at the time said IC card is coupled to said one of the terminals, so that said terminal of said second terminal cannot access said first access program and said terminal of said first group can access both said first and second purse" as recited in the claims of the present application.

The advantage of having a **selecting steps program** as recited in the claims of the present application is that this allows either a "first purse" or a "second purse" to be accessed according to the type of "terminal" the IC card is coupled to.

If the first purse is to be accessed, ciphering and deciphering is required. Therefore, the only way to access the first purse is when the IC card is coupled to a terminal in the first terminal group. If the IC card is coupled to a terminal in the second terminal group which does not perform ciphering or deciphering, access to the first purse will be denied.

If the second purse is to be accessed, no ciphering or deciphering has to be performed. Therefore, terminals in either the first or second terminal group will be able to access the second purse.

In this way there are two level of access to a IC card. A first level (first purse) that requires ciphering and deciphering, and a second level (second purse) that does not require ciphering or deciphering.

Harrop is silent with respect to the limitation of "**a selecting steps program which selects one of said purse access programs according to a received information** at the time said IC card is coupled to said one of the terminals, so that said terminal of said second terminal cannot access said first access program and said terminal of said first group can access both said first and second purse" as recited in the claims of the present application and described above.

Read at best discloses a first, second and third memory levels. However, Read fails to disclose the limitation of "**a selecting steps program which selects one of said purse access programs according to a received information** at the time said IC card is coupled to said one of the terminals, so that said terminal of said second terminal cannot

access said first access program and said terminal of said first group can access both said first and second purse" as recited in the claims of the present application and described above.

Read is silent with respect to accessing different memories based upon the type of terminal the IC card is coupled to. For instance, Read fails to disclose, teach or suggest "a selecting steps program which selects one of said purse access programs according to a received information at the time said IC card is coupled to said one of the terminals, so that *said terminal of said second terminal cannot access said first access program and said terminal of said first group can access both said first and second purse*" as recited in the claims of the present application. As previously discussed a terminal in the first terminal group will have access to the first and second purse. However, a terminal in the second terminal group does not have ciphering capability and will not have access to the first purse. Therefore, a terminal in the second terminal group only has access to the second purse.

Read at best discloses a free memory level which can be read from and written to. However there is no disclosure, suggestion or teaching of dividing the free memory level of Read into two purses which can be accessed according to the type of terminal an IC card is coupled to and also according to whether ciphering is required.

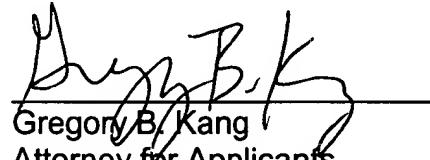
In light of the foregoing, withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

Applicants submit that the Application is now in condition for allowance. If the Examiner believes that the Application is not in condition for allowance, Applicants

respectfully request that the Examiner contact the undersigned attorney by telephone if it is believed that such contact will expedite the prosecution of the Application.

In the event this paper is not timely filed, Applicants hereby petition for an appropriate extension of time. The fee for this extension may be charged to our Deposit Account No. 01-2300, along with any additional fees which may be required with respect to this paper.

Respectfully submitted,



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MARKED-UP COPY OF CLAIMS

13. (Amended) An electronic purse system having a double-structured purse comprising:

an IC card;

a first terminal group which can transfer money to the IC card, wherein each terminal in the first group includes a first ciphering/deciphering unit which performs ciphering/deciphering of information relating to money utilizing a code number;

a second terminal group which can transfer money to the IC card, wherein each terminal in the second group does not perform ciphering/deciphering of the information related to money; and

the IC card, including

a) a first purse,

b) a second purse, [and]

c) a second ciphering/deciphering unit for ciphering/deciphering of the information related to money obtained from one of the terminals in the first terminal group utilizing the code number, and

d) an access control program including:

a first purse access program to access said first purse using a second ciphering unit during the communication during a transaction with said terminal,

a second purse access program to access said second purse without said ciphering and/or deciphering, and

selecting steps program which selects one of said purse access programs according to a received information at the time said IC card is coupled to said one of the terminals, so that said terminal of said second terminal cannot access said first access program and said terminal of said first group can access both said first and second purse,

wherein, when making a payment from the first purse, information relating to the money is transferred between the first purse and the one terminal of the first terminal group after ciphering of the information in the first and second ciphering/deciphering units in the IC card and in the terminal of the first terminal group, and

wherein, when making a payment from the second purse, the information related to the money is transferred between the second purse and one of the terminals of the second terminal group without ciphering of the information.

14. (Amended) An IC card applicable to an electronic purse system having a double-structured purse comprising:

a first purse for storing a first amount of money therein;

a second purse for storing a second amount of money therein; [and]

a first ciphering/deciphering means for ciphering/deciphering of information relating to money obtained from a first terminal having a second ciphering/deciphering unit and utilizing a code number, and

an access control program including:

a first purse access program to access said first purse using a second ciphering unit during the communication during a transaction with said terminal,

a second purse access program to access said second purse without said ciphering and/or deciphering, and

a selecting steps program which selects one of said purse access programs according to a received information at the time said IC card is coupled to said one of the terminals, so that said terminal of said second terminal cannot access said first access program and said terminal of said first group can access both said first and second purse,

wherein, when making a payment from the first purse, information is transferred between the first purse and the first terminal after ciphering of the information in the first and second ciphering/deciphering units in the IC card and in the first terminal, and wherein, when making a payment from the second purse, information is transferred between the second purse and a second terminal without ciphering of the information.

## MARKED-UP COPY OF SPECIFICATION

Page 40, first paragraph:

Then, if the amount of money stored in the work area W2 updated in step S1502 is zero or plus (step S1503), the processing shifts to step S1107 [S1504], but if the amount of money stored in the work area W2 is minus (step S1503), because even the balance in the first purse obtained by adding the balance in the second purse thereto is less than the demand amount of money for payment, the transaction for payment is regarded as invalidated.

*1.C-* Page 55, first paragraph:

When the ordinary transaction telephone unit finishes the preprocessing, a machine ID of its own is read out (step T202). At this point of time, a display screen requesting entry of a demand amount for payment is formed on the display 502 [402] of the ordinary transaction telephone unit. IN this step, entry of the demand amount for payment becomes possible, and if the demand amount for payment is entered thereafter, the amount to be paid is temporarily stored in memory 506. Then, after a machine ID is sent together with a payment command to the IC card 1 (step T203), the ordinary transaction telephone unit waits for receiving an amount of money in the second purse sent from the IC card 1 (step T204).

Page 66, last paragraph:

The CPU 610 provides controls over the machine on the whole. The memory 611 comprises a ROM for storing therein a program with which a CPU 610 operates an a RAM used as a work area of the CPU 610. The external memory 612 is a high-capacity memory such as a hard disk. The [back] bank IC card reader 613 has an ordinary bank card inserted therein for operating a sequence for on-line banking and reads information on authorization from the card.